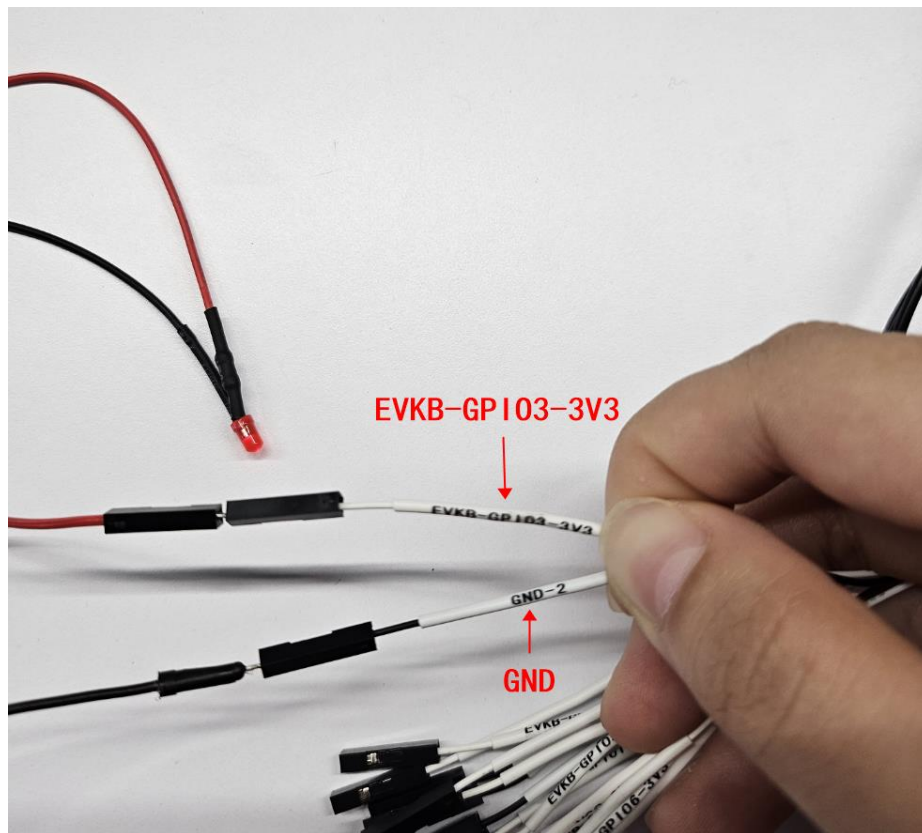


Aidlux 下 GPIO 口功能测试

V1.1

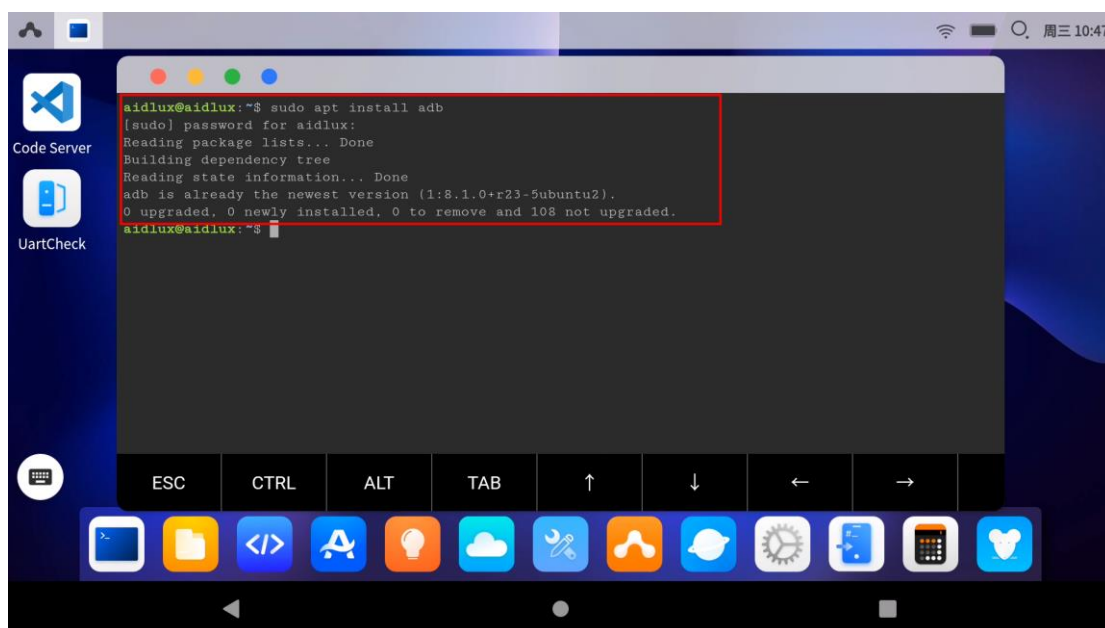
1、将 GPIO 异性转接口连接上

下面以 EVKB-GPIO3-3V3 为例，将一个 LED 小灯，一端连接至 EVKB-GPIO3-3V3，另一端接 GND，如图所示



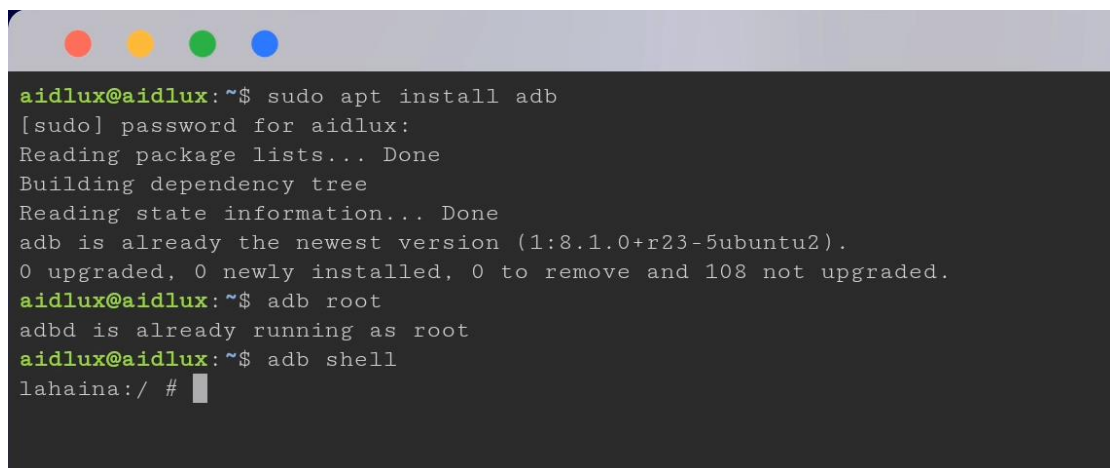
2、小灯连接好后，上电开机，打开 aidlux，并且打开终端，在终端下安装 ADB 工具，密码为：aidlux

```
sudo apt install adb
```



3、在终端输入:

```
adb root
adb shell
```



```
aidlux@aidlux:~$ sudo apt install adb
[sudo] password for aidlux:
Reading package lists... Done
Building dependency tree
Reading state information... Done
adb is already the newest version (1:8.1.0+r23-5ubuntu2).
0 upgraded, 0 newly installed, 0 to remove and 108 not upgraded.
aidlux@aidlux:~$ adb root
adb is already running as root
aidlux@aidlux:~$ adb shell
lahaina:/ #
```

4、此时进入路径 sys/class/gpio, 导出 EVKB-GPIO3-3V3 的 gpio 控制节点, 对照下表, 也就是 aidlux 下的 gpio488, 并进入 gpio488 路径下

Aidlux 下	<----->	GPIO 异形口引脚
gpio488	<----->	EVKB-GPIO3-3V3
gpio489	<----->	EVKB-GPIO4-3V3
gpio432	<----->	EVKB-GPIO5-3V3
gpio433	<----->	EVKB-GPIO6-3V3
gpio436	<----->	EVKB-GPIO7-3V3
gpio434	<----->	EVKB-GPIO8-3V3
gpio435	<----->	EVKB-GPIO9-3V3
gpio385	<----->	EVKB-GPIO10-3V3

在终端输入:

```
cd sys/class/gpio
echo 488 > export
ls
cd gpio488
```



```
lahaina:/ # cd sys/class/gpio
lahaina:/sys/class/gpio # echo 488 > export
lahaina:/sys/class/gpio # ls
export  gpio350  gpio433  gpio488      gpiochip313  gpiochip332  unexport
gpio349  gpio351  gpio486  gpiochip298  gpiochip322  gpiochip336
lahaina:/sys/class/gpio # cd gpio488
lahaina:/sys/class/gpio/gpio488 #
```

5、在终端下输入:

```
cat direction      -----查询 gpio 是做输入还是输出(in 为输入, out 为输出)
cat value          -----查询 gpio 寄存器的值, 查询 gpio 高低电平
echo out > direction -----控制 gpio 做输出
echo 0 > value     -----改变 gpio 寄存器的值, 控制 gpio 高低电平
```

```
lahaina:/sys/class/gpio/gpio488 # cat direction
in
lahaina:/sys/class/gpio/gpio488 # cat value
1
lahaina:/sys/class/gpio/gpio488 # echo out > direction
lahaina:/sys/class/gpio/gpio488 # cat direction
out
lahaina:/sys/class/gpio/gpio488 # echo 0 > value
lahaina:/sys/class/gpio/gpio488 # cat value
0
lahaina:/sys/class/gpio/gpio488 #
```

5、当寄存器的值改为 1 时，小灯亮灯，当寄存器的值改为 0 时，小灯灭灯

```
lahaina:/sys/class/gpio/gpio488 # echo 1 > value
lahaina:/sys/class/gpio/gpio488 # cat value
1
```



```
lahaina:/sys/class/gpio/gpio488 # echo 0 > value
lahaina:/sys/class/gpio/gpio488 # cat value
0
```

